FIGURE 1 (Sheet 1 of 8)

```
          tgctccaatgcagcgatctgtgcccgagggggttcggaaggcgcaagctgggcagcgacat
       1  ---------+---------+---------+---------+---------+---------+ 60
          acgaggttacgtcgctagacacgggctccccaagccttccgcgttcgacccgtcgctgta

b                                                                    M  -



          ggggaacgcggagcgggctccggggtctcggagctttgggcccgtacccacgctgctgct
      61  ---------+---------+---------+---------+---------+---------+ 120
          ccccttgcgcctcgcccgaggccccagagcctcgaaacccgggcatgggtgcgacgacga

b         G  N  A  E  R  A  P  G  S  R  S  F  G  P  V  P  T  L  L  L  -



          gctcgccgcggcgctactggccgtgtcggacgcactcgggcgcccctccgaggaggacga
     121  ---------+---------+---------+---------+---------+---------+ 180
          cgagcggcgccgcgatgaccggcacagcctgcgtgagcccgcggggaggctcctcctgct

b         L  A  A  A  L  L  A  V  S  D  A  L  G  R  P  S  E  E  D  E  -



          ggagctagtggtgccggagctggagcgcgcccccgggacacgggaccacgcgcctccgcct
     181  ---------+---------+---------+---------+---------+---------+ 240
          cctcgatcaccacggcctcgacctcgcgcggggccctgtgccctggtgcgcggaggcgga

b         E  L  V  V  P  E  L  E  R  A  P  G  H  G  T  T  R  L  R  L  -



          gcacgcctttgaccagcagctggatctggagctgcggcccgacagcagctttttggcgcc
     241  ---------+---------+---------+---------+---------+---------+ 300
          cgtgcggaaactggtcgtcgacctagacctcgacgccgggctgtcgtcgaaaaaccgcgg

b         H  A  F  D  Q  Q  L  D  L  E  L  R  P  D  S  S  F  L  A  P  -



          cggcttcacgctccagaacgtggggcgcaaatccgggtccgagacgccgcttccggaaac
     301  ---------+---------+---------+---------+---------+---------+ 360
          gccgaagtgcgaggtcttgcaccccgcgtttaggcccaggctctgcggcgaaggcctttg

b         G  F  T  L  Q  N  V  G  R  K  S  G  S  E  T  P  L  P  E  T  -



          cgacctggcgcactgcttctactccggcaccgtgaatggcgatcccagctcggctgccgc
     361  ---------+---------+---------+---------+---------+---------+ 420
          gctggaccgcgtgacgaagatgaggccgtggcacttaccgctagggtcgagccgacggcg

b         D  L  A  H  C  F  Y  S  G  T  V  N  G  D  P  S  S  A  A  A  -



          cctcagcctctgcgagggcgtgcgcggcgccttctacctgctggggggaggcgtatttcat
     421  ---------+---------+---------+---------+---------+---------+ 480
          ggagtcggagacgctcccgcacgcgccgcggaagatggacgaccccctccgcataaagta

b         L  S  L  C  E  G  V  R  G  A  F  Y  L  L  G  E  A  Y  F  I  -
```

FIGURE 1 (Sheet 2 of 8)

```
           ccagccgctgcccgccgccagcgagcgcctcgccaccgccgcccccaggggagaagccgcc
      481  ---------+---------+---------+---------+---------+---------+ 540
           ggtcggcgacgggcggcggtcgctcgcggagcggtggcggcggggtcccctcttcggcgg

        b      Q   P   L   P   A   A   S   E   R   L   A   T   A   A   P   G   E   K   P   P   -


           ggcaccactacagttccacctcctgcggcggaatcggcagggcgacgtcggcggcacgtg
      541  ---------+---------+---------+---------+---------+---------+ 600
           ccgtggtgatgtcaaggtggaggacgccgccttagccgtcccgctgcagccgccgtgcac

        b      A   P   L   Q   F   H   L   L   R   R   N   R   Q   G   D   V   G   G   T   C   -


           cggggtcgtggacgacgagccccggccgactgggaaagcggagaccgaagacgaggacga
      601  ---------+---------+---------+---------+---------+---------+ 660
           gccccagcacctgctgctcggggccggctgaccctttcgcctctggcttctgctcctgct

        b      G   V   V   D   D   E   P   R   P   T   G   K   A   E   T   E   D   E   D   E   -


           agggactgagggcgaggacgaaggggctcagtggtcgccgcaggacccggcactgcaagg
     ·661  ---------+---------+---------+---------+---------+---------+ 720
           tccctgactcccgctcctgcttccccgagtcaccagcggcgtcctgggccgtgacgttcc

        b      G   T   E   G   E   D   E   G   A   Q   W   S   P   Q   D   P   A   L   Q   G   -


           cgtaggacagcccacaggaactggaagcataagaaagaagcgatttgtgtccagtcaccg
      721  ---------+---------+---------+---------+---------+---------+ 780
           gcatcctgtcgggtgtccttgaccttcgtattctttcttcgctaaacacaggtcagtggc

        b      V   G   Q   P   T   G   T   G   S   I   R   K   K   R   F   V   S   S   H   R   -


           ctatgtggaaaccatgcttgtggcagaccagtcgatggcagaattccacggcagtggtct
      781  ---------+---------+---------+---------+---------+---------+ 840
           gatacacctttggtacgaacaccgtctggtcagctaccgtcttaaggtgccgtcaccaga

        b      Y   V   E   T   M   L   V   A   D   Q   S   M   A   E   F   H   G   S   G   L   -


           aaagcattaccttctcacgttgttttcggtggcagccagattgtacaaacaccccagcat
      841  ---------+---------+---------+---------+---------+---------+ 900
           tttcgtaatggaagagtgcaacaaaagccaccgtcggtctaacatgtttgtggggtcgta

        b      K   H   Y   L   L   T   L   F   S   V   A   A   R   L   Y   K   H   P   S   I   -


           tcgtaattcagttagcctggtggtggtgaagatcttggtcatccacgatgaacagaaggg
      901  ---------+---------+---------+---------+---------+---------+ 960
           agcattaagtcaatcggaccaccaccacttctagaaccagtaggtgctacttgtcttccc

        b      R   N   S   V   S   L   V   V   V   K   I   L   V   I   H   D   E   Q   K   G   -
```

FIGURE 1 (Sheet 3 of 8)

```
       gccggaagtgacctccaatgctgccctcactctgcggaactttttgcaactggcagaagca
  961  --------+---------+---------+---------+---------+--------+  1020
       cggccttcactggaggttacgacgggagtgagacgccttgaaaacgttgaccgtcttcgt
```

b   P   E   V   T   S   N   A   A   L   T   L   R   N   F   C   N   W   Q   K   Q -

```
       gcacaacccacccagtgaccgggatgcagagcactatgacacagcaattcttttcaccag
 1021  --------+---------+---------+---------+---------+--------+  1080
       cgtgttgggtgggtcactggccctacgtctcgtgatactgtgtcgttaagaaaagtggtc
```

b   H   N   P   P   S   D   R   D   A   E   H   Y   D   T   A   I   L   F   T   R -

```
       acaggacttgtgtgggtcccagacatgtgatactcttgggatggctgatgttggaactgt
 1081  --------+---------+---------+---------+---------+--------+  1140
       tgtcctgaacacacccagggtctgtacactatgagaaccctaccgactacaaccttgaca
```

b   Q   D   L   C   G   S   Q   T   C   D   T   L   G   M   A   D   V   G   T   V -

```
       gtgtgatccgagcagaagctgctccgtcatagaagatgatggtttacaagctgccttcac
 1141  --------+---------+---------+---------+---------+--------+  1200
       cacactaggctcgtcttcgacgaggcagtatcttctactaccaaatgttcgacggaagtg
```

b   C   D   P   S   R   S   C   S   V   I   E   D   D   G   L   Q   A   A   F   T -

```
       cacagcccatgaattaggccacgtgtttaacatgccacatgatgatgcaaagcagtgtgc
 1201  --------+---------+---------+---------+---------+--------+  1260
       gtgtcgggtacttaatccggtgcacaaattgtacggtgtactactacgtttcgtcacacg
```

b   T   A   H   E   L   G   H   V   F   N   M   P   H   D   D   A   K   Q   C   A -

```
       cagccttaatggtgtgaaccaggattcccacatgatggcgtcaatgctttccaacctgga
 1261  --------+---------+---------+---------+---------+--------+  1320
       gtcggaattaccacacttggtcctaagggtgtactaccgcagttacgaaaggttggacct
```

b   S   L   N   G   V   N   Q   D   S   H   M   M   A   S   M   L   S   N   L   D -

```
       ccacagccagccttggtctccttgcagtgcctacatgattacatcatttctggataatgg
 1321  --------+---------+---------+---------+---------+--------+  1380
       ggtgtcggtcggaaccagaggaacgtcacggatgtactaatgtagtaaagacctattacc
```

b   H   S   Q   P   W   S   P   C   S   A   Y   M   I   T   S   F   L   D   N   G -

```
       tcatggggaatgtttgatggacaagcctcagaatcccatacagctcccaggcgatctccc
 1381  --------+---------+---------+---------+---------+--------+  1440
       agtaccccttacaaactacctgttcggagtcttagggtatgtcgagggtccgctagaggg
```

FIGURE 1 (Sheet 4 of 8)

b   H G E C L M D K P Q N P I Q L P G D L P -

```
       tggcacctcgtacgatgccaaccggcagtgccagtttacatttggggaggactccaaaca
1441   ---------+---------+---------+---------+---------+---------+ 1500
       accgtggagcatgctacggttggccgtcacggtcaaatgtaaacccctcctgaggtttgt
```

b   G T S Y D A N R Q C Q F T F G E D S K H -

```
       ctgccctgatgcagccagcacatgtagcaccttgtggtgtaccggcacctctggtggggt
1501   ---------+---------+---------+---------+---------+---------+ 1560
       gacgggactacgtcggtcgtgtacatcgtggaacaccacatggccgtggagaccacccca
```

b   C P D A A S T C S T L W C T G T S G G V -

```
       gctggtgtgtcaaaccaaacacttcccgtgggcggatggcaccagctgtggagaagggaa
1561   ---------+---------+---------+---------+---------+---------+ 1620
       cgaccacacagtttggtttgtgaagggcacccgcctaccgtggtcgacacctcttccctt
```

b   L V C Q T K H F P W A D G T S C G E G K -

```
       atggtgtatcaacggcaagtgtgtgaacaaaacccacagaaagcattttgatacgccttt
1621   ---------+---------+---------+---------+---------+---------+ 1680
       taccacatagttgccgttcacacacttgttttgggtgtctttcgtaaaactatgcggaaa
```

b   W C I N G K C V N K T H R K H F D T P F -

```
       tcatggaagctggggaatgtggggggccttggggagactgttcgagaacgtgcggtggagg
1681   ---------+---------+---------+---------+---------+---------+ 1740
       agtaccttcgacccccttacaccccggaacccctctgacaagctcttgcacgccacctcc
```

b   H G S W G M W G P W G D C S R T C G G G -

```
       agtccagtacacgatgagggaatgtgacaacccagtcccaaagaatggagggaagtactg
1741   ---------+---------+---------+---------+---------+---------+ 1800
       tcaggtcatgtgctactcccttacactgttgggtcagggtttcttacctcccttcatgac
```

b   V Q Y T M R E C D N P V P K N G G K Y C -

```
       tgaaggcaaacgagtgcgctacagatcctgtaaccttgaggactgtccagacaataatgg
1801   ---------+---------+---------+---------+---------+---------+ 1860
       acttccgtttgctcacgcgatgtctaggacattggaactcctgacaggtctgttattacc
```

b   E G K R V R Y R S C N L E D C P D N N G -

```
       aaaaacctttagagaggaacaatgtgaagcacacaacgagttttcaaaagcttcctttgg
1861   ---------+---------+---------+---------+---------+---------+ 1920
```

FIGURE 1 (Sheet 5 of 8)

tttttggaaatctctccttgttacacttcgtgtgttgctcaaaagttttcgaaggaaacc

b   K   T   F   R   E   E   Q   C   E   A   H   N   E   F   S   K   A   S   F   G   -

```
       gagtgggcctgcggtggaatggattcccaagtacgctggcgtctcaccaaaggacaggtg
1921   ---------+---------+---------+---------+---------+---------+---------+ 1980
       ctcacccggacgccaccttacctaagggttcatgcgaccgcagagtggtttcctgtccac
```

b   S   G   P   A   V   E   W   I   P   K   Y   A   G   V   S   P   K   D   R   C   -

```
       caagctcatctgccaagccaaaggcattggctacttcttcgttttgcagcccaaggttgt
1981   ---------+---------+---------+---------+---------+---------+---------+ 2040
       gttcgagtagacggttcggtttccgtaaccgatgaagaagcaaaacgtcgggttccaaca
```

b   K   L   I   C   Q   A   K   G   I   G   Y   F   F   V   L   Q   P   K   V   V   -

```
       agatggtactccatgtagcccagattccacctctgtctgtgtgcaaggacagtgtgtaaa
2041   ---------+---------+---------+---------+---------+---------+---------+ 2100
       tctaccatgaggtacatcgggtctaaggtggagacagacacgttcctgtcacacattt
```

b   D   G   T   P   C   S   P   D   S   T   S   V   C   V   Q   G   Q   C   V   K   -

```
       agctggttgtgatcgcatcatagactccaaaaagaagtttgataaatgtggtgtttgcgg
2101   ---------+---------+---------+---------+---------+---------+---------+ 2160
       tcgaccaacactagcgtagtatctgaggttttttcttcaaactatttacaccacaaacgcc
```

b   A   G   C   D   R   I   I   D   S   K   K   K   F   D   K   C   G   V   C   G   -

```
       gggaaatggatctacttgtaaaaaaatatcaggatcagttactagtgcaaaacctggata
2161   ---------+---------+---------+---------+---------+---------+---------+ 2220
       ccctttacctagatgaacatttttttatagtcctagtcaatgatcacgttttggacctat
```

b   G   N   G   S   T   C   K   K   I   S   G   S   V   T   S   A   K   P   G   Y   -

```
       tcatgatatcatcacaattccaactggagccaccaacatcgaagtgaaacagcggaacca
2221   ---------+---------+---------+---------+---------+---------+---------+ 2280
       agtactatagtagtgttaaggttgacctcggtggttgtagcttcactttgtcgccttggt
```

b   H   D   I   I   T   I   P   T   G   A   T   N   I   E   V   K   Q   R   N   Q   -

```
       gaggggatccaggaacaatggcagctttcttgccatcaaagctgctgatggcacatatat
2281   ---------+---------+---------+---------+---------+---------+---------+ 2340
       ctcccctaggtccttgttaccgtcgaaagaacggtagtttcgacgactaccgtgtatata
```

b   R   G   S   R   N   N   G   S   F   L   A   I   K   A   A   D   G   T   Y   I   -

tcttaatggtgactacactttgtccaccttagagcaagacattatgtacaaaggtgttgt

FIGURE 1 (Sheet 6 of 8)

```
2341 ---------+---------+---------+---------+---------+---------+ 2400
     agaattaccactgatgtgaaacaggtggaatctcgttctgtaatacatgtttccacaaca

b       L  N  G  D  Y  T  L  S  T  L  E  Q  D  I  M  Y  K  G  V  V  -


     cttgaggtacagcggctcctctgcggcattggaaagaattcgcagctttagccctctcaa
2401 ---------+---------+---------+---------+---------+---------+ 2460
     gaactccatgtcgccgaggagacgccgtaacctttcttaagcgtcgaaatcgggagagtt

b       L  R  Y  S  G  S  S  A  A  L  E  R  I  R  S  F  S  P  L  K  -


     agagcccttgaccatccaggttcttactgtgggcaatgcccttcgacctaaaattaaata
2461 ---------+---------+---------+---------+---------+---------+ 2520
     tctcgggaactggtaggtccaagaatgacacccgttacgggaagctggattttaatttat

b       E  P  L  T  I  Q  V  L  T  V  G  N  A  L  R  P  K  I  K  Y  -


     cacctacttcgtaaagaagaagaaggaatctttcaatgctatccccacttttttcagcatg
2521 ---------+---------+---------+---------+---------+---------+ 2580
     gtggatgaagcatttcttcttcttccttagaaagttacgatagggggtgaaaaagtcgtac

b       T  Y  F  V  K  K  K  K  E  S  F  N  A  I  P  T  F  S  A  W  -


     ggtcattgaagagtggggcgaatgttctaagtcatgtgaattgggttggcagagaagact
2581 ---------+---------+---------+---------+---------+---------+ 2640
     ccagtaacttctcaccccgcttacaagattcagtacacttaacccaaccgtctcttctga

b       V  I  E  E  W  G  E  C  S  K  S  C  E  L  G  W  Q  R  R  L  -


     ggtagaatgccgagacattaatggacagcctgcttccgagtgtgcaaaggaagtgaagcc
2641 ---------+---------+---------+---------+---------+---------+ 2700
     ccatcttacggctctgtaattacctgtcggacgaaggctcacacgtttccttcacttcgg

b       V  E  C  R  D  I  N  G  Q  P  A  S  E  C  A  K  E  V  K  P  -


     agccagcaccagaccttgtgcagaccatccctgcccccagtggcagctggggggagtggtc
2701 ---------+---------+---------+---------+---------+---------+ 2760
     tcggtcgtggtctggaacacgtctggtagggacggggggtcaccgtcgacccccctcaccag

b       A  S  T  R  P  C  A  D  H  P  C  P  Q  W  Q  L  G  E  W  S  -


     atcatgttctaagacctgtgggaagggttacaaaaaaagaagcttgaagtgtctgtccca
2761 ---------+---------+---------+---------+---------+---------+ 2820
     tagtacaagattctggacacccttcccaatgttttttttcttcgaacttcacagacagggt

b       S  C  S  K  T  C  G  K  G  Y  K  K  R  S  L  K  C  L  S  H  -
```

FIGURE 1 (Sheet 7 of 8)

```
        tgatggaggggtgttatctcatgagagctgtgatcctttaaagaaacctaaacatttcat
2821    ---------+---------+---------+---------+---------+---------+ 2880
        actacctccccacaatagagtactctcgacactaggaaatttctttggatttgtaaagta

b        D   G   G   V   L   S   H   E   S   C   D   P   L   K   K   P   K   H   F   I   -
```

```
        agacttttgcacaatggcagaatgcagttaagtggtttaagtggtgttagctttgagggc
2881    ---------+---------+---------+---------+---------+---------+ 2940
        tctgaaaacgtgttaccgtcttacgtcaattcaccaaattcaccacaatcgaaactcccg

b        D   F   C   T   M   A   E   C   S   *                                      -
```

```
        aaggcaaagtgaggaagggctggtgcagggaaagcaagaaggctggagggatccagcgta
2941    ---------+---------+---------+---------+---------+---------+ 3000
        ttccgtttcactccttcccgaccacgtccctttcgttcttccgacctccctaggtcgcat
```

```
        tcttgccagtaaccagtgaggtgtatcagtaaggtgggattatgggggtagatagaaaag
3001    ---------+---------+---------+---------+---------+---------+ 3060
        agaacggtcattggtcactccacatagtcattccaccctaatacccccatctatcttttc
```

```
        gagttgaatcatcagagtaaactgccagttgcaaatttgataggatagttagtgaggatt
3061    ---------+---------+---------+---------+---------+---------+ 3120
        ctcaacttagtagtctcatttgacggtcaacgtttaaactatcctatcaatcactcctaa
```

```
        attaacctctgagcagtgatatagcataataaagccccgggcattattattattatttct
3121    ---------+---------+---------+---------+---------+---------+ 3180
        taattggagactcgtcactatatcgtattatttcggggcccgtaataataataataaaga
```

```
        tttgttacatctattacaagtttagaaaaaacaaagcaattgtcaaaaaaagttagaact
3181    ---------+---------+---------+---------+---------+---------+ 3240
        aaacaatgtagataatgttcaaatcttttttgtttcgttaacagttttttttcaatcttga
```

```
        attacaacccctgtttcctggtacttatcaaaatacttaagtatcatgggggttgggaaa
3241    ---------+---------+---------+---------+---------+---------+ 3300
        taatgttggggacaaaggaccatgaatagttttatgaattcatagtaccccaaccctttt
```

```
        tgaaaagtaggagaaaagtgagattttacttaagacctgtttttactttaccttcactaac
3301    ---------+---------+---------+---------+---------+---------+ 3360
        acttttcatcctcttttcactctaaaatgaattctggacaaaatgaaatggaagtgattg
```

```
        aatggggggagaaaggagtacaaataggatctttgaccagcactgtttatggctgctatg
3361    ---------+---------+---------+---------+---------+---------+ 3420
        ttacccccctctttcctcatgtttatcctagaaactggtcgtgacaaataccgacgatac
```

FIGURE 1 (Sheet 8 of 8)

```
      gtttcagagaatgtttatacattatttctaccgagaattaaaacttcagattgttcaaca
3421  ---------+---------+---------+---------+---------+---------+ 3480
      caaagtctcttacaaatatgtaataaagatggctcttaattttgaagtctaacaagttgt


      tgagagaaaggctcagcaacgtgaaataacgcaaatggcttcctctttccttttttggac
3481  ---------+---------+---------+---------+---------+---------+ 3540
      actctctttccgagtcgttgcactttattgcgtttaccgaaggagaaaggaaaaaacctg


      catctcagtctttatttgtgtaattcattttgaggaaaaaacaactccatgtatttattc
3541  ---------+---------+---------+---------+---------+---------+ 3600
      gtagagtcagaaataaacacattaagtaaaactcctttttttgttgaggtacataaataag


      aagtgcattaaagtctacaatggaaaaaaagcagtgaagcattagatgctggtaaaagct
3601  ---------+---------+---------+---------+---------+---------+ 3660
      ttcacgtaatttcagatgttacctttttttcgtcacttcgtaatctacgaccattttcga


      agaggagacacaatgagcttagtacctccaacttcctttctttcctaccatgtaaccctg
3661  ---------+---------+---------+---------+---------+---------+ 3720
      tctcctctgtgttactcgaatcatggaggttgaaggaaagaaaggatggtacattgggac


      ctttgggaatatggatgtaaagaagtaacttgtgtctcatgaaaatcagtacaatcacac
3721  ---------+---------+---------+---------+---------+---------+ 3780
      gaaacccttatacctacatttcttcattgaacacagagtacttttagtcatgttagtgtg


      aaggaggatgaaacgccggaacaaaaatgaggtgtgtagaacagggtcccacaggtttgg
3781  ---------+---------+---------+---------+---------+---------+ 3840
      ttcctcctactttgcggccttgttttactccacacatcttgtcccagggtgtccaaacc


      ggacattgagatcacttgtcttgtggtggggaggctgctgaggggtagc
3841  ---------+---------+---------+---------+--------- 3889
      cctgtaactctagtgaacagaacaccacccctccgacgactccccatcg
```